Joseph Romm

Senior Fellow

Center For American Progress Action Fund

Testimony on

"The American Energy Initiative"

House Committee on Energy and Commerce Subcommittee on Energy and Power

March 28, 2012

Mr. Chairman, members of the Committee, I am delighted to appear before you today to discuss what I believe is the only plausible way to protect Americans from high oil prices.

My name is Dr. Joseph Romm. I am a Senior Fellow at the Center for American Progress Action Fund, a tax exempt organization dedicated to improving the lives of Americans by transforming progressive values and ideas into policy. I hold a Ph.D. in physics from M.I.T.

From 1993 to 1995, I was special assistant for policy and planning to the Deputy Secretary of Energy, who oversaw all of DOE's energy programs, including the Strategic Petroleum Reserve. I served as Principal Deputy Assistant Secretary and then Acting Assistant Secretary at DOE's Office of Energy Efficiency and Renewable Energy in the mid-1990s. In that capacity, I helped manage the largest program in the world for working with businesses to develop and use oil-reducing technologies. I first testified in front of the House on oil prices in 1995.

My testimony will provide analysis and data to support 6 key points:

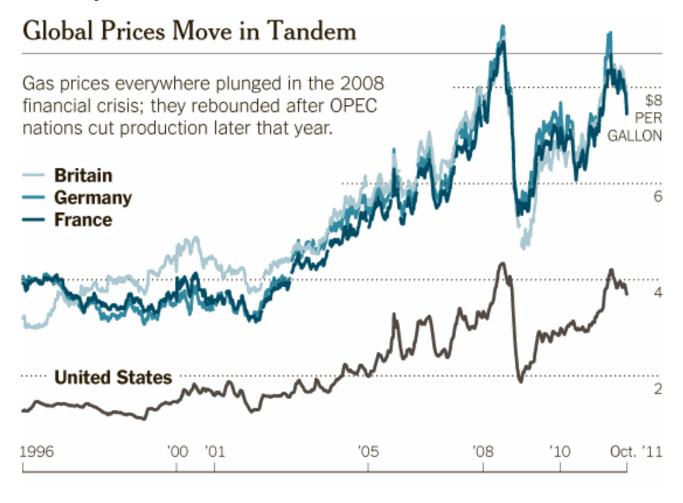
- 1. There is broad agreement among energy experts and economists that increasing domestic oil production will have no noticeable impact on U.S. gasoline prices for the foreseeable future. Oil prices are set on a world market. That's why our gasoline prices rise and fall in tandem with European countries even though they produce little oil and we produce a great deal.
- 2. The rise in US gasoline prices has come at a time of soaring US gasoline production. So while President Obama has adopted an aggressive pro-drilling strategy. It has, as expected, not worked to lower prices for U.S. As the Cato Institute explained this month, "It's Not Obama's Fault That Crude Oil Prices Have Increased."
- 3. U.S. refining costs account for a mere one eighth of the price of gasoline. The costs of reducing pollutants that harm public health and our children are a small fraction of that small fraction. As the *Wall Street Journal* has noted, "According to the U.S. Energy Information Administration, Germans over the past three years have paid an average of \$2.64 a gallon (excluding taxes), while Americans paid \$2.69" even though we produce 200 times as much oil as they do. Sen. Jeff Bingaman explained this month, "We do not face these cycles of high gasoline prices because of lack of access to federal resources, or because of some environmental regulation that is getting in the way of us obtaining cheap gasoline."
- 4. Every independent study shows that EPA regulations deliver benefits to the economy and public health that vastly exceed their short-term costs. Economic analysis does not support the conclusion that EPA regulations have harmed US competitiveness and indeed some analyses suggest that they have boosted our competitiveness by giving us market leadership in cleaner technologies. Given that our major industrialized trading competitors pay \$2 to \$4 a gallon more for gasoline than we do, it would be essentially impossible for the tiny impact EPA regulations might have to harm U.S. competitiveness.
- 5. There is only one demonstrated way to reduce gasoline prices (a little) in the short term and that is a release of oil from the Strategic Petroleum Reserve, ideally in concert with a similar release by our allies.
- 6. The only thing that can protect Americans from rising gasoline prices and global oil shocks is an aggressive strategy to reduce the country's oil intensity (oil consumed per dollar of GDP), including a steady increase the fuel efficiency of our vehicles and an alternative fuel vehicle policy built around electricity. As the Council on Foreign Relations put it: "The amount of oil you produce at home doesn't affect the price ... You can lower your vulnerability to price by lowering your consumption of oil, but not by increasing your production."

Thus the two bills under consideration would have no noticeable impact on U.S. gasoline prices.

It is rare when there is broad agreement from leading economists and groups spanning the political spectrum, including the Center for American Progress Action Fund and the Cato Institute and American Enterprise Institute; the Wall Street Journal and the New York Times; the Bipartisan Policy Center and the Council on Foreign Relations, the Energy Information Administration and the Oil Price Information Service. They all say more U.S. drilling won't noticeably lower gas prices.

As the Center for Economic and Policy Research <u>put it</u>: "There is almost no disagreement among economists that drilling everywhere all the time offshore will have almost no impact on the price of gas in the United States. The reason is that we have a world market for oil. The additional oil that might come from offshore drilling is a drop in the bucket in a world oil market of almost 90 million barrels a day."

This broad agreement is based on solid data.

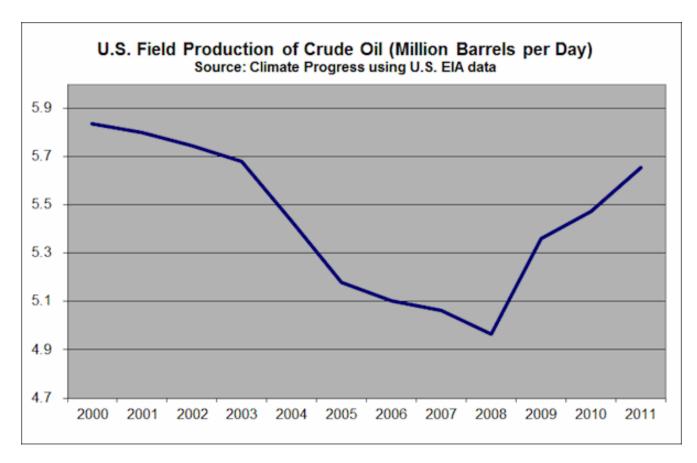


America produces 200 times as much oil as Germany, but our gas prices rise and fall in tandem (we pay far lower gas taxes). Source: Energy Information Administration and NY Times.

Oil prices are set on a global market. Douglas Holtz-Eakin – former CBO Director and then chief economist for President George W. Bush's Council of Economic Advisers -- wrote in March "Domestic action to increase production will not lower gas prices set on a global market."

As the chart above makes clear, it is the world market price for oil that determines changes in the price for gasoline in countries like ours – not domestic production or domestic regulations.

The Obama Administration has succeeded at increasing production and decreasing dependency on foreign oil — but it has unsurprisingly failed at affecting global markets.



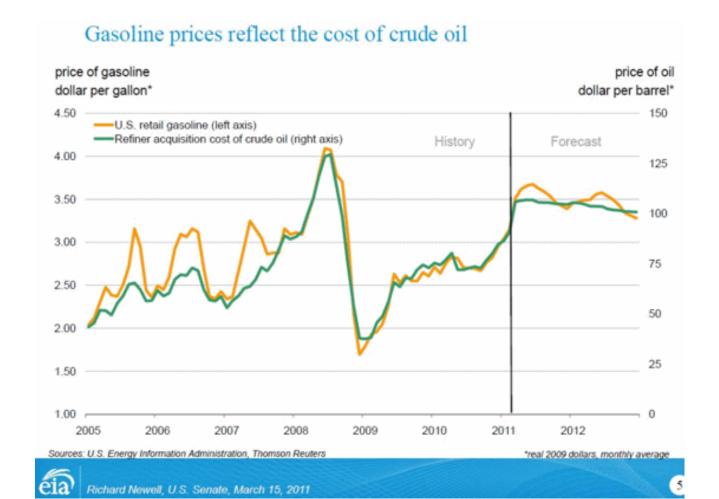
The Wall Street Journal explained in March:

U.S. gas prices ... are largely fixed by the price of crude oil, which is determined by global supply and demand.

When Mr. Obama was inaugurated, demand was weak due to the recession. But now it's stronger, and thus the price is higher.

What's more, producing a lot of oil doesn't lower the price of gasoline in your country. According to the U.S. Energy Information Administration, Germans over the past three years have paid an average of \$2.64 a gallon (excluding taxes), while Americans paid \$2.69, even though the U.S. produced 5.4 million barrels of oil per day while Germany produced just 28,000.

Last year, Sen. Bingaman (D-NM), chair of the Senate Energy and Natural Resources Committee, made a presentation that underscored these points. He included this chart, which makes clear that it is the cost of crude oil that drives U.S. gasoline prices and very little else.



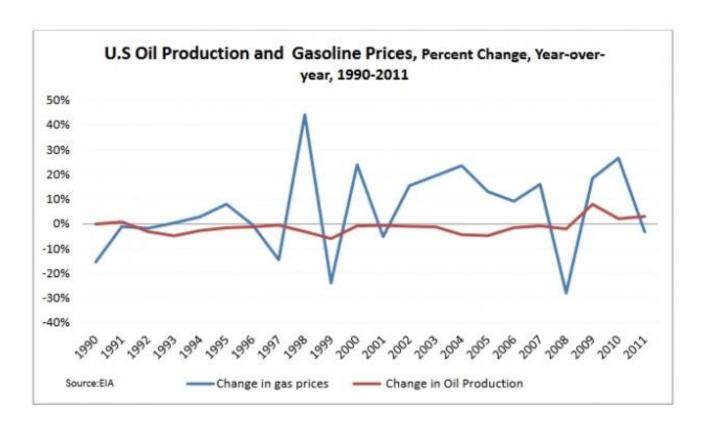
Here is how Sen. Bingaman put it:

The starting point for the [Senate briefing by oil experts] was one fundamental truth: the primary driver of the price for gasoline at the pump is the price of crude oil. This chart [above] was one of the key ones used by EIA Administrator Newell. It shows the price trends since 2005 for gasoline (in yellow) and crude oil (in green).... [F]or the last 3 years, gasoline price movements have exactly tracked global crude oil prices. The idea that our gasoline prices are high today because of some policy of the Obama Administration is just not supported by the facts....

The bulk of the discussion at the briefing that we held on Tuesday about high oil prices was about what is going on in the Middle East and North Africa. It should be obvious that this is the major force driving oil prices.... As you can see from this chart, oil prices are very sensitive to these kinds of developments....

But what can Congress do to help ease the burden of high prices for U.S. consumers, when oil prices are determined mostly outside our borders? I think a realistic, responsible answer has to be focused on becoming less vulnerable to oil price changes over the medium- and long-term. And we become less vulnerable by using less oil.

In a floor speech this month, Sen. Bingaman showed a <u>new chart</u> that highlights this point:



We're not going to noticeably change U.S. gasoline prices through more drilling and more domestic production or gutting regulations to protect public health.

In an essay that appeared in *U.S. News & World Report* earlier this month, "It's Not Obama's Fault That Crude Oil Prices Have Increased," Cato Institute scholars <u>explain</u>:

Why have gasoline prices increased since the start of the year? The simplest explanation is that the price of crude oil has increased. Specifically, the spot price for Brent (North Sea) crude has increased \$16 a barrel since January. Given that there are 42 gallons to a barrel, that works out to a 38 cent increase in the price of a gallon of oil. Spot prices for gasoline trade in New York have increased about 41 cents per gallon over the same time frame. So there you go.

Why is the price of North Sea oil relevant to the price of gasoline in the United States? Well, we import gasoline refined in Europe from North Sea crude. Even though these imports constitute less than 10 percent of U.S. gasoline consumption, they are necessary to satisfy domestic demand and their price sets the market price for all gasoline regardless of whether other cheaper crude sources are used to refine most of our gasoline.

Why is the price of North Sea crude rising? One possibility is that supply is down. North Sea (British) production has been decreasing for some time. During the first quarter of 2007, it was 1.7 million barrels a day, or mbd. By the end of 2011, it was down to 1.1 mbd. Norwegian crude oil production has likewise decreased from 2.7 mbd in the first quarter of 2007 to 2.1 mbd at the end of 2011. And global demand is bidding up the price of crude oil from the North Sea and elsewhere.

Ironically, during the same time period, U.S. crude oil production has marched upward for the first time since 1971. Since the start of 2007, U.S. production has increased by 2.1 mbd. Sure, more domestic oil creates the possibility of fewer refined imports tied to the price of Brent crude, but given that the price of Brent sets the price for crude generally, the result would be more profit for domestic crude producers rather than significantly lower gasoline prices for Americans (not that there's anything wrong with that).

So despite the popular perception of President Obama as anti-oil, domestic oil production is increasing for the first time since the Johnson administration.... Unfortunately, presidents get blamed for world market changes that occur during their time in office ... but generally, they do not cause them.

Finally, the EIA's 2009 report, "Impact of Limitations on Access to Oil and Natural Gas Resources in the Federal Outer Continental Shelf" analyzed the difference between full offshore drilling (Reference Case) and restriction to offshore drilling (OCS limited case). Adding 270,000 barrels of oil a day in 2020 relative to the reference case **has no impact on gasoline prices whatsoever** (right hand column). Adding 540,000 barrels of oil a day in 2030 relative to the reference case, lowers gasoline prices by three cents.

Annual Energy Outlook 2009 with Projections to 2030

Table 9. Crude oil and natural gas production and prices in two cases, 2020 an

Projection	Crude oil production (million barrels per day)	Crude oil price (2007 dollars per barrel)	Motor gasoline price (2007 dollars per gallon)
2020			
Reference case	6.48	115.45	3.60
OCS limited case	6.21	115.56	3.60
Difference from reference case	-0.27	0.10	0.00
Percent difference from reference case 2030	-4.2	0.1	0.0
Reference case	7.37	130.43	3.88
OCS limited case	6.83	131.76	3.91
Difference from reference case	-0.54	1.34	0.03
Percent difference from reference case	-7.4	1.0	0.8

And, as we've seen, the actual increase in U.S. production of more than 600,000 barrels of oil a day in the past few years has not stopped the recent gasoline price rise.

As for the impact of environmental regulations, U.S. refining costs account for a mere one eighth of the price of gasoline. The costs of reducing pollutants that harm public health and our children are a small fraction of that small fraction. As noted above, the *Wall Street Journal* pointed out this month, "According to the U.S. Energy Information Administration, Germans over the past three years have paid an average of \$2.64 a gallon (excluding taxes), while Americans paid \$2.69" – even though we produce 200 times as much oil as they do. Sen. Jeff Bingaman also explained this month, "We do not face these cycles of high gasoline prices because of lack of access to federal resources, or because of some environmental regulation that is getting in the way of us obtaining cheap gasoline."

Every independent study shows that Environmental Protection Agency regulations deliver benefits to the economy and public health that vastly exceed their short-term costs. The White House Office of Management and Budget's thirteenth annual Report to Congress detailed the estimated benefits and costs of federal Regulations. Its principal findings:

The estimated annual benefits of major Federal regulations reviewed by OMB from October 1, 1999, to September 30, 2009, for which agencies estimated and monetized both benefits and costs, are in the aggregate between \$128 billion and \$616 billion, while the estimated annual costs are in the aggregate between \$43 billion and \$55 billion.

Some rules are estimated to produce far higher net benefits than others. Moreover, there is substantial variation across agencies in the total net benefits produced by rules. For example, the air pollution rules from the Environmental Protection Agency(EPA) produced 60 to 87 percent of the benefits and 58 to 64 percent of the costs.

The report found that the EPA regulations have, between 1999 and 2009, had aggregate costs of \$26 to \$29 billion while delivering benefits from \$82 billion up to an astonishing \$533 billion.

Economic analysis does not support the conclusion that EPA regulations have harmed US competitiveness – and indeed some analyses suggest that they have boosted our competitiveness by giving us market leadership in cleaner technologies. Indeed, as The *Atlantic Monthly* noted in January:

... government regulators at the Environmental Protection Agency may have helped make U.S. refiners more competitive in the global marketplace. How? By forcing them to create cleaner burning diesel fuel.

If you look at the <u>Energy Information Administration's</u> breakdown of the country's petroleum of product exports, one category should jump out at you: distillate fuel oil. That's the technical term for what we all know as diesel. In October of 2011, U.S. refiners shipped out about 2.7 million barrels a day of finished petroleum products. Forty percent of those barrels contained diesel fuel. Gasoline only accounted for 19 percent.

It makes sense that diesel should make up such a big chunk of our finished fuel exports. As Tom Kloza, chief analyst with the Oil Price Information Service, told me, in much of the world diesel rules. Europeans use it to power their cars. South Americans use it to power their tractors. Many governments, particularly in Europe, are requiring varieties with lower levels of sulfer, a major air pollutant that causes respiratory problems and contributes to acid rain. In the last several years, Kloza said, U.S. oil refineries in the Gulf of Mexico have invested heavily in the sophisticated technology necessary to create that kind of clean diesel fuel. Two-thirds of U.S. diesel exports in October were the variety known as "ultra low sulfur."

The investment that made those exports possible didn't happen by accident. Nor was it purely due to the forces of capitalism. In 2001, the EPA <u>issued a new rule</u> that reduced the amount of sulfur allowed in highway diesel fuel by 97%, from 500 parts per million to just 15. Part of the regulations, which went into effect in 2006, forced refineries to begin producing more of the cleaner diesel. In response, oil refiners spent billions updating their plants with the necessary equipment, <u>adding roughly 37%</u> more desulferization capacity.

As a result, U.S. refiners now make a product that's more ready for the global marketplace.

Given that our major industrialized trading competitors pay \$2 to \$4 a gallon more for gasoline than we do, it would be essentially impossible for the tiny impact EPA regulations might have to harm U.S. competitiveness.

There are very few immediate actions that government can take to stop the oil price escalator. We tried opening up most of the Gulf of Mexico to offshore drilling a few years ago, but that failed miserably and oil prices have risen sharply since then. More supply isn't going to have a noticeable impact, as we've seen.

But selling a relatively modest amount of crude oil from the U.S. Strategic Petroleum Reserve while promoting oil efficiency could pop the speculative oil price bubble and lower prices. The Center for American Progress Action Fund has put together this table of the Strategic Petroleum Reserve's impact on gasoline prices over the short term:

Getting some relief at the pump

Strategic Petroleum Reserve oil sales' effects on gasoline prices

President	SPR oil sale announcement	Percent SPR filled	Percent change in oil price	Percent change in gasoline price
George H. W. Bush	January 1991	81%	-18%	-11.7%
Bill Clinton	May 1996	79%	-10%	-5.4%
Bill Clinton	October 1996	78%	-0.5%	+1.0%
George W. Bush	September 2005	94%	-16%	-19.2%
Barack Obama	June 2011	100%	-17%	-5.9%

Prices in weekly U.S. regular all formulations retail gasoline prices (dollars per gallon)

Sources: U.S. Department of Energy, "Releasing Crude Oil From the Strategic Petroleum Reserve," available at http://fossil.energy.gov/programs/reserves/spr/spr-drawdown.html.; U.S. Energy Information Administration, "Weekly U.S. Regular All Formulations Retail Gasoline Prices (Dollars per Gallon)," available at http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPMR_PTE_NUS_DPG&f=W.

As my colleague Dan Weiss has noted:

There is also a legitimate concern about adequate oil reserves in case of a severe Iranian supply disruption, but we have ample supplies in the SPR to withstand it. <u>Iran exports 2.2 million barrels of oil per day</u> worldwide, and none of it comes to the United States. The United States could replace these Iranian exports to other nations for 60 days, and our reserves would still be 80 percent full. And after completely offsetting a 180-day disruption in Iranian oil supplies, the SPR would still be 40 percent full.

Iran has also threatened to cut off the <u>Strait of Hormuz</u> through which 17 million barrels of oil travel every day. This is about one-fifth of worldwide consumption. There is enough oil in the SPR that the United States could replace this oil for three weeks, and its reserves would still be half full. The bigger challenge in that scenario is that the SPR can release no more than 4.4 million barrels per day.

Obviously sales of the SPR are a temporary measure. If you are concerned about the impact of high oil prices from Middle East instability, the only viable long-term strategy is one aimed at ending our addiction to this climate-destroying fossil fuel.

As <u>Michael Levi</u> of the Council on Foreign Relations has said: "The amount of oil you produce at home doesn't affect the price ... You can lower your vulnerability to price by lowering your consumption of oil, but not by increasing your production."

Fatih Birol, the chief energy economist of the once-staid and conservative International Energy Agency, said in 2009, "We have to leave oil before oil leaves us".

I'll conclude with the remarks Sen. Bingaman made in his recent floor speech:

"The long-term solution to the challenge of high and volatile oil prices is to continue to reduce our dependence on oil, period. This is a strategic vision that President George W. Bush, who previously had worked in the oil industry, clearly articulated in his State of the Union speech in 2006. We subsequently proved in Congress in 2007, the year after that State of the Union speech, that we have the ability to make significant changes in our energy consumption, and that it is possible to mobilize a bipartisan consensus to do that.

"The bipartisan path that the Senate embraced in 2007 is still the right approach today. As part of whatever approach we take to energy and transportation in the weeks and months ahead, we need to be honest with our constituents about what works, and we need to keep moving in that direction with that 2007 bill. We need to allow the facts, and not myths, to be our best guide."